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APR 16 2007

Appl. No. 10/624,293
Amendment

Attorney Docket No. 35197.20 / 03W048
Customer No. 27683

Amendments To The Claims

The following list of the claims replaces all prior versions and lists of the claims in this application.

1. (Currently amended) An apparatus comprising a firearm sight which includes:
a viewing section that permits a user to view an image of a target in association with a reticle;
a sensing section for detecting a physical movement of said firearm sight which is characteristic of a ~~firing pin striking a cartridge~~ physical impact associated with a cartridge striking mechanism; and
an imaging section responsive to detection by said sensing section of said physical movement for saving an image of the target and said reticle from a point in time just prior to detection of said physical movement.
2. (Original) An apparatus according to Claim 1, wherein said imaging section is responsive to detection by said sensing section of said physical movement for saving a sequence of images of the target and said reticle from a time interval which begins before detection of said physical movement, one of said images in said sequence being said image from said point in time.
3. (Original) An apparatus according to Claim 1, wherein said image saved by said imaging section is a digital image.
4. (Original) An apparatus according to Claim 3, wherein said viewing section includes:
a digital image detector capable of producing a sequence of images of the target; and
a display on which said viewing section presents for a user said sequence of images with said reticle superimposed thereon.

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5. (Original) An apparatus according to Claim 1, wherein said sensing section includes a solid state electronic accelerometer.

6. (Currently amended) An apparatus according to Claim 5,
wherein said physical impact involves a physical impact with a firing pin; and
wherein said sensing section effects bandpass filtering of an output of said accelerometer to select energy with frequency components characteristic of a the physical impact with the firing pin striking a cartridge.

7. (Original) An apparatus comprising a viewing section which permits a user to view an image of a scene in association with a digital reticle, said viewing section including a reticle adjustment portion which facilitates digital adjustment of the position of said reticle relative to the image.

8. (Original) An apparatus according to Claim 7, wherein said reticle adjustment portion permits a user to manually effect said adjustment of the position of said reticle.

9. (Original) An apparatus according to Claim 7, wherein said reticle adjustment portion permits a user to manually effect said adjustment of the position of said reticle independently in two different directions.

10. (Original) An apparatus according to Claim 7, wherein said viewing section includes:

an image detector capable of producing a sequence of digital images of said scene; and
a display which is visible to a user and on which said viewing section presents said sequence of digital images with said digital reticle superimposed thereon, said reticle adjustment portion effecting adjustment of the position of said reticle by changing the position at which said reticle is superimposed on said display.

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11. (Original) An apparatus according to Claim 7, including a rifle sight, said viewing section being a portion of said rifle sight.

12. (Original) An apparatus comprising a sight having a viewing section and having a port through which a digital reticle can be introduced electronically into said viewing section from externally of said sight, said viewing section permitting a user to view an image of a scene in association with a digital reticle received through said port.

13. (Original) An apparatus according to Claim 12, wherein said viewing section includes:

an image detector capable of producing a sequence of digital images of said scene; and
a display which is visible to a user and on which said viewing section presents said sequence of digital images with the digital reticle superimposed thereon.

14. (Original) An apparatus according to Claim 12, wherein said sight is a rifle sight.

15. (Original) An apparatus comprising a firearm sight with a viewing section which includes:

an image detector capable of producing a sequence of digital images of a target;
a display on which said viewing section presents said sequence of digital images, said display being visible to a user and having a resolution which is less than a resolution of said image detector; and
a digital zoom portion which can digitally change an effective size of said digital images as presented on said display.

16. (Original) An apparatus comprising:
a viewing section which permits a user to view an image of a scene in association with a reticle;

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a sensing portion for detecting movement of said viewing section which has a component approximately transverse to a line extending from said scene to said viewing section; and

a further section for providing the user with information based on said movement of said viewing section detected by said sensing portion.

17. (Original) An apparatus according to Claim 16, wherein said information provided by said further section includes an indicator which is presented in association with said scene and said reticle, and which has a size that is varied as a function of changes in said movement of said viewing section as detected by said sensing portion.

18. (Original) An apparatus according to Claim 17, wherein said indicator is a circle which has a centerpoint disposed at a predetermined location on said reticle, and which has a diameter that is varied as a function of changes in said movement of said viewing section as detected by said sensing portion.

19. (Original) An apparatus according to Claim 16, wherein said movement detected by said sensing portion is a rate of angular movement of said viewing section with respect to a vertical reference.

20. (Original) An apparatus according to Claim 16, including a rifle sight, said viewing section, sensing portion and further section being respective portions of said rifle sight.

21. (Original) An apparatus comprising a firearm sight which includes:
a viewing section configured to permit a user to view an image of a scene in association with a digital reticle;
a reticle adjustment portion which facilitates digital adjustment of the position of said reticle relative to said image, said reticle adjustment portion being responsive to radiation received by said firearm sight which is representative of a position of a firearm bore for

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automatically adjusting the position of said reticle to effect an alignment of said reticle in relation to the firearm bore.

22. (Original) An apparatus according to Claim 21, wherein said viewing section includes an image detector; and including a device which is separate from said firearm sight, which has a first portion engageable with the firearm bore for supporting said device in a position of alignment with the firearm bore, and which has a second portion with a reflective characteristic, said radiation representative of a position of the firearm bore being a reflection onto said image detector by said second portion of an image of said image detector.

23. (Original) An apparatus according to Claim 22, wherein said reticle adjustment portion effects said automatic adjusting of the position of said reticle in a manner which includes determining a centroid of said reflection of said image detector, and then adjusting the position of said reticle relative to said centroid.